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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,965

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Gordon Cichon

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24IP LAW GROUP USA, PLLC
12 E. LAKE DRIVE
ANNAPOLIS, MD 21403

EXAMINER

DOAN, NGHIA M

ART UNIT

PAPER NUMBER

2825

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,965	Applicant(s) CICHON, GORDON	
	Examiner NGHIA M. DOAN	Art Unit 2825	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is response to the Application 10/595,965 filed on 05/23/2006. Claims 1-16 are pending in the instance office action.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because figure 1 is not visible and clearly detail each element in the figure and claim limitations. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, **“the process recited in claim 1”, “machine description”, “altered machine description”, “database”, “functional unit”, “common control signal”, “input and output”, “data element”, and “vectoral value”** must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure

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is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: **"altered machine description", "database", "functional unit", "common control signal", "parameter of the number and type of the inputs and outputs", "disk", "disk module", "reduced functional unit", "vector processing functional unit", "data element", and "vectoral value"**.

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

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5. The disclosure is objected to because of the following informalities: the priority claimed should be added in the first paragraph of the application specification.

Appropriate correction is required.

Claim Objections

6. Claim 1-18 are objected to because of the following informalities:
7. As per claim 1, the word "SIMD" should be spelled out.
8. As per claims 4-6, replaces "disc" with -- disk--.
9. As per claims 2-18 replaces "A process" with -- The process --.
10. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 9-16 been renumbered 9-18.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. Claim 1 is directly to a non-statutory of a process which recited to steps may reasonably done by person or purely mental process and it also does not appear that the recited steps of process being tied to any particular apparatus or machine (Note: the language of claim sound tied to particular machine or apparatus, but it is not because

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the elements are described still under a data) nor such transformed underlying physical subject to different state or thing (see *In re Bilski*, 88 U.S.P.Q.2d 1391 (Fed. Cir. 2008) (*en banc*) & MPEP 2106.IV.B).

14. Claims 1-18 (renumbered) are rejection 35 U.S.C 101 non-statutory because the claims 1-18 recited the abstract idea of process a making and using a product, but the product does not provide any functionality and incomplete structural.

Claim Rejections - 35 USC § 112

15. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

16. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

17. As per claim 1, recited the limitations **“altered machine description”**, **“database”**, **“functional unit”**, **“common control signal”**, **“parameter of the number and type of the inputs and outputs”**, **“disk”**, **“disk module”**, **“reduced functional unit”**, **“vector processing functional unit”**, **“data element”**, and **“vectoral value”**, which are does not describe what are they in the application specification, how are they function or operated to provide the practice application of claim invention, such as what are **“altered machine description”** and **“reduced**

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functional unit”? how the **“altered machine description”** and **“reduced functional unit”** can be derived or implemented from "the machine description" and **“functional unit”**, respectively recited in the claim preamble? what are relationship between **“altered machine description”** and "the machine description"; and **“reduced functional unit”** and **“functional unit”**, respectively. What is **“common control signal”**, **“parameter of the number and type of the inputs and outputs”**, **“disk”**, **“disk module”**, **“vector processing functional unit”**, **“data element”**, and **“vectoral value”** and how are **“common control signal”**, **“parameter of the number and type of the inputs and outputs”**, **“disk”**, **“disk module”**, **“reduced functional unit”**, **“vector processing functional unit”**, **“data element”**, and **“vectoral value”**?

18. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

19. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

20. As per claim 1, recited the limitations **“altered machine description”**, **“database”**, **“functional unit”**, **“common control signal”**, **“parameter of the number and type of the inputs and outputs”**, **“disk”**, **“disk module”**, **“reduced functional unit”**, **“vector processing functional unit”**, **“data element”**, and **“vectoral value”**, but are not clear defined from the application specification and claim language of what are they? how are they functionalities? Where are they coming from?

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21. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The claim 1 is missing the relationship of functional or structural between “the **“altered machine description”** with **“the machine description”**; and **“reduced functional unit”** with **“functional unit”**; **“vector processing functional unit”** with **“vectoral value”** and **“data element”**.

22. As per claim 1, line 3, recited “an SIMD processor, which contains common control signal sharing disks for the processing of different data respectively, in which the geometry of the processor is produced at least indirectly from a machine description, which **consists** of a database, **contains** definitions of several functional units, **consist** of at least parameters of the number and types of the inputs and outputs and the connection of the functional units with other functional units”, which are unable interpret whether “**consists** of a database, **contains** definitions of several functional units, **consist** of at least parameters of the number and types of the inputs and outputs and the connection of the functional units with other functional units” belong to “a SIMD processor” or “machine description”?

23. Regarding claim 1, the phrase **“in such a way”** and **“so often”** renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

24. Claim 1 provides for the use of **“altered machine description”**, but, since the claim does not set forth any steps involved in the method/process, it is unclear what

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method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

25. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

26. Claims 1-18 are rejected under 35 U.S.C. 102(a) as being anticipated by Naishlos et al., (Vectorizing for a SIMdD DSP processor, ACM, Nov. 1st, 2003).

27. With respect to claims 1-18, Naishlos disclose a model of SIMD can be compiler to achieve near-optimal performance (see entire documents and particular fig. 1, 2, 9, 11, and 24). **(Note: Each limitations can not be mapped into the prior art because each limitation recited in claim language are not understandable, Examiner rejected based on the Best Understood).**

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGHIA M. DOAN whose telephone number is (571)272-5973. The examiner can normally be reached on 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghia M. Doan
/Nghia M Doan/
Examiner, Art Unit 2825

/Thuan Do/

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